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Re: Case Comments for PUR-2019-00207
Virginia Natural Gas, Inc. Header Improvement Project

Thomas Hadwin's Response to VNG Rebuttal Comments
Virginia Natural Gas, Inc. Header Improvement Project
Case Number PUR-2019-00207

General

Virginia Natural Gas (VNG) is required to respond to a request for service. According to VNG's application, C4GT's request for service is the primary need driving this project. Once the project was initiated, Virginia Power Services Energy (VPSE), Columbia Gas of Virginia (CVA), and Virginia Natural Gas also came forth with requests for service.

The Virginia State Corporation Commission (SCC) must identify whether these requests for service are valid, especially for C4GT. If the largest amount of new capacity is reserved for C4GT and its generating station fails to go into service or retires before it has fulfilled the 20-year term of its capacity contract, the remaining shippers, VNG, or perhaps VNG's ratepayers would be left paying for the remaining obligation.

The SCC would be wise to avoid the practice of the Federal Energy Regulatory Commission (FERC) in its approval of new pipeline projects. FERC looks only for the existence of precedent agreements as the proxy for need, without any evaluation of true market demand or consideration of whether superior alternatives exist. As a result, FERC has authorized the development of new gas transmission pipeline capacity in the past twenty years that is twice the capacity needed to transport the peak national gas usage in 2017.[1]Adding unnecessary pipeline capacity either burdens ratepayers or injures pipeline developers.

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[1] Susan Tierney, *Natural Gas Pipeline Certification: Policy Considerations for a Changing Industry*, ANALYSIS GROUP (Nov. 6, 2017)

Any failure to properly assess the risks for this project and set appropriate conditions to limit those risks could harm families and businesses in Virginia or cripple an important gas utility (VNG).

Southern Company, the nation's ninth largest utility, appears willing to put its subsidiary, Virginia Natural Gas, at risk to gain the considerable profits offered by the Header Improvement Project (HIP). According to SCC staff testimony, 45% of the estimated $1.34 billion in lifetime revenue from the project would be return on rate base (profit), with an additional 28% related to return of investment through depreciation.[2]

VNG appears focused mostly on the profit opportunity with little attention to the risk. VNG's rebuttal testimony shows a failure to fully grasp the conditions that currently influence the development of natural gas infrastructure in Virginia at this time. Mr. Yegelski, Director of Gas Supply, was asked about VNG's view of the recent energy legislation passed in the 2020 session of the Virginia General Assembly. Regarding Virginia's participation in the Regional Greenhouse Gas Initiative (RGGI), he said that the HIP "is precisely the type of natural gas infrastructure required to ensure adequate natural gas supply over the coming decades."[3]

The response seems out of touch with the fact that the purpose of the initiative is to reduce carbon emissions from electric generating stations, the majority of which are gas-fired in Virginia. Reductions to meet annually declining caps are accomplished by plant retirements or less electricity generated by gas-fired units, which reduce the need for gas supply.[4]

VNG has proposed a 70-year operating life for the HIP. This ignores the Virginia Clean Economy Act (VCEA), which compels C4GT to close by the end of 2050 (after 28 years of operation).[5] All of Dominion's carbon-emitting facilities in Virginia must close by the end of 2045, according to the Act.

SCC's staff expert says that in 2042, after C4GT completes its 20-year firm transportation agreement, 43 percent of the cost of the pipeline remains unpaid.[6] Dominion would require only a few more years of service. C4GT would operate eight more years, at most. After that, the remaining 42 years of pipeline operation must be supported by the remaining shippers or VNG alone.

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[2] Summary of Testimony of Scott C. Armstrong, Staff Pre-filed Testimony Part 2, March 31, 2020, Virginia State Corporation Commission, Case No. PUR-2019-00207

[3] Kenneth W. Yagelski, VNG Rebuttal Testimony, April 14, 2020, Virginia State Corporation Commission, Case No. PUR-2019-00207

[4] "Virginia lawmakers agreed to join a regional carbon market," Sarah Vogelsong, April 14, 2020, Virginia Mercury

[5] HB 1526 Virginia Clean Economy Act, 2020 Virginia General Assembly Session

[6] Summary of Testimony of Scott C. Armstrong, Staff Pre-filed Testimony Part 2, March 31, 2020, Virginia State Corporation Commission, Case No. PUR-2019-00207

The risks associated with each capacity contract and suggested remedies are described below:

C4GT

C4GT is a gas-fired electric generating plant being developed by an independent power producer in Charles City County, Virginia. The project is not in response to a verified need for additional generating capacity to serve any Virginia utility, co-op, or municipality. As a merchant generator, C4GT must obtain all of its revenues from sales of electricity into the regional wholesale electricity market. Investor-owned utilities in Virginia, such as Dominion Energy Virginia, are repaid by ratepayers for the full cost of building a new power plant, plus financing charges and a guaranteed profit. Ratepayers also repay fuel costs and other operating expenses. C4GT is totally on its own. It must bear all of the costs in hope of making a profit.

VNG notes that C4GT is "driving the need" for the new pipeline.[7] It is risky for a speculative project to be the reason to invest $345.9 million in a new pipeline.

2017 All Over Again

C4GT has been here before. The company was permitted by the SCC to build the facility in Charles City County in May 2017.[8] Here is what it had going for it:

- Reasonable capacity surplus at PJM
- Stable electricity demand
- Access to low-cost capital
- No RGGI carbon allowance costs
- Could have powered the Peninsula and avoided the significant expense and visual impact of Dominion's transmission line crossing the James

Yet, the project was postponed and C4GT asked for an extension of its SCC approval.

2020 Much More Challenging

C4GT has informed VNG that it wishes to "adjust the projected in-service date" for its participation in the pipeline project, "due to uncertainty in the gas supply and financial markets" caused by Covid-19.[9] C4GT is now facing significant headwinds:

- It will attempt to sell its output into a wholesale market (PJM) that is over-supplied with capacity. In 2023, C4GT's intended first full year of operation, PJM will have 35% more

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[7] Kenneth W. Yagelski, VNG Rebuttal Testimony, April 14, 2020, Virginia State Corporation Commission, Case No. PUR-2019-00207

[8] Application, Appendix IV. K. at 83; *Application of C4GT, LLC For certification of an electric generating facility in Charles City County pursuant to § 56-580 D of the Code of Virginia,* Case No. PUE-2016-00104, 2017 S.C.C. Ann. Rept. 378, 382, Final Order (May 3, 2017).

[9] Kenneth W. Yagelski, VNG Rebuttal Testimony, April 14, 2020, Virginia State Corporation Commission, Case No. PUR-2019-00207

capacity than it needs to meet its peak demand.[10] The surplus rises to 60% in 2027. This is far above the 14.9% reserve capacity PJM needs to maintain highly reliable operation.[11]

- The economic setback caused by Covid-19, has reduced electricity demand in PJM by 8-10%.[12]
- A respected industry consultant forecasts that recovery in demand will begin in 2021, but there is a scenario where losses run through 2023.[13] After the last recession, electricity usage reached a lower stable level for a decade even though population growth and economic activity continued to increase.
- RGGI allowances must be paid in full from the first year of operation. C4GT and Chickahominy hired lobbyists in an unsuccessful attempt to get a law passed this year that would exempt the Charles City County power plants from having to pay for RGGI allowances during the first three years of operation.[14] The proposed exemptions would have removed $131 million from the state's revenue stream for RGGI allowances, according to the DEQ.[15] The merchant generators said failure to get the exemption might put the projects at risk.
- C4GT would use 21% of Virginia's carbon cap in 2030. That total allocation is supposed to be shared with 33 other power plants in the state. The added competition for allowances will likely raise auction prices, increasing costs for electricity consumers.
- The Covid-19 related economic downturn has caused significant competition for capital to help businesses and workers ride out the economic disruption and fund a recovery. C4GT admitted it is having difficulty attracting the necessary capital to build the facility on schedule.

Limited Operating Life

A consideration for investors in the power plant and for the VNG pipeline is the requirement of the Virginia Clean Economy Act for carbon emitting facilities, such as C4GT, to cease operation by 2050.[16] This would provide a maximum operating life of 28 years for the power plant. A shorter life makes it more difficult to create a positive return for investors. It certainly curtails the revenue flow for the pipeline. The largest user would require pipeline capacity for only 40% of

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[10] "Overpowered: Why a US gas building spree continues despite electricity glut," Stephanie Tsao and Richard Martin, December 2, 2019, S&P Global Market Intelligence, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/54188928.

[11] 2019 PJM Reserve Requirement Study, October 8, 2019

[12] "PJM Demand Reaching New Lows Amid the Coronavirus Pandemic," Pat Finn, et. al., April 24, 2020, Genscape

[13] "WoodMac: Coronavirus Will Undercut North American Power Demand Through 2021," Rob Whaley and Paul Taube, April 7, 2020, GreenTech Media

[14] Senate Bill No. 992, Virginia General Assembly, Offered January 16, 2020

[15] "Bill to protect two Charles City gas plants from RGGI effects moving quietly through Senate," Sarah Vogelsong, February 6, 2020, Virginia Mercury

[16] HB 1526 Virginia Clean Economy Act, 2020 Virginia General Assembly Session

the pipeline's intended service life. Reducing the depreciation period for the pipeline would assure that each shipper would pay for its own use of the pipeline.

<u>Chickahominy is an Indicator of C4GT's Situation</u>

The Chickahominy project is a larger merchant generating facility under development about a mile away from the C4GT site. It is intended to be in operation about the same time as the C4GT plant, but has not yet obtained its water use permit from the DEQ.

Argan, Inc. is assisting in the financing of the project and has the right to design and construct the Chickahominy facility. Argan also needs "additional time" to secure "the necessary equity financing." Saying "we currently cannot predict when construction will commence, if at all." Given such uncertainty, the company reveals that "we have not included the value of this contract in our project backlog."[17]

Requested SCC Action:

C4GT bailed out of its previous commitment under more favorable circumstances. Its current request for service should not be considered secure enough to become the foundation for an investment in the HIP. The Commission should not authorize the Header Improvement Project until the situation with C4GT is resolved. As the primary reason for building the pipeline, C4GT should be required to provide evidence that it is prepared to fulfill its timetable (whatever it might be). The SCC must set conditions so that VNG's investment on C4GT's behalf would be less at risk.

The SCC could impose a condition that C4GT devote the time and resources to be accepted on PJM's generation queue, with a specific in-service date. PJM's capacity auction takes place three years in advance of commercial operation which gives room to initiate the 30-month process required by VNG to provide gas service.

A project can be removed from the queue, so it is not an iron-clad guarantee that the merchant generator will fulfill its obligations. But it would require some time and resources beyond just signing a precedent agreement.

VNG is not being realistic, if it believes the C4GT precedent agreement gives it some degree of assurance or leverage. C4GT, LLC is not the same type of business as a public utility such as Dominion or Columbia Gas. The limited liability structure allows the owners of the project to walk away whenever they wish, with little additional exposure for investors.

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[17] Argan, Inc. Marketscreener, https://www.marketscreener.com/ARGAN-INC-14449787/news/Argan-Fiscal-Year-Results-30422808/

Virginia Power Services Energy (VPSE)

Virginia Power Services Energy is a wholly owned subsidiary of Virginia Electric and Power Company, now doing business as Dominion Energy Virginia. VPSE acquires fuel supplies and pipeline capacity reservations to support the utility's operation.

The information that VNG has provided to the public in this case is incomplete (redacted). It is not possible to accurately determine the reason Dominion would require additional gas supply. It is puzzling why the Commission would allow the withholding of information that makes it difficult for the public to have the information it needs to protect its interest. Interstate pipeline applications include such basic information as the amount of capacity reserved, initial rates, and the general form and terms of precedent agreements. Why should intrastate pipelines, usually subject to a less competitive environment, be more obscure about the details of projects that the public will ultimately pay for?

Dominion's Request for Service also Appears Unfounded

Based on the limited information provided, the VPSE request for service also appears to be insufficient to be considered a valid request for service for the VNG pipeline, for the following reasons:

In its 2019 Order establishing the Fuel Factor for Dominion Energy Virginia, the Commission stated that Dominion's portfolio of pipeline capacity reservations "is reasonably sized for the size of its generation fleet."[18]

In testimony at the 2019 Fuel Factor hearing, witness Lander stated that "25% of its [Dominion's] total used capacity on the Transco system . . . went to uses other than Company power plants." Mr. Lander went on to say "I conclude that the company has ample pipeline capacity to serve additional power generation should that be necessary."[19]

On March 24, 2020 Dominion asked the Commission to allow it to avoid evaluating the risk of constructing new gas-fired generating facilities in its upcoming 15-year plan. The Company stated that "significant build-out of natural gas generation facilities is not currently viable" due to the recent passage of the Virginia Clean Economy Act.[20]

VPSE has a 20-year commitment for 300,000 Dth/d of capacity from the Atlantic Coast Pipeline (ACP) projected to begin in 2022.[21] With a huge surplus of capacity and no plans for a

[18] ORDER ESTABLISHING 2019-2020 FUEL FACTOR, Virginia Electric and Power Company, Case No. PUR-2019-00070, August 15, 2019

[19] Testimony of Gregory M. Lander, June 19, 2019, Case No. PUR-2019-00070, State Corporation Commission

[20] Motion for Relief from Certain Requirements, Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597 et *seq.*, Case No. PUR-2020-00035, March 24, 2020

[21] Application for a Certificate of Public Convenience and Necessity, Atlantic Coast Pipeline, LLC, September 18, 2015, Federal Energy Regulatory Commission, Docket No. CP15-000

"significant build-out of natural gas generation facilities" why is an additional capacity reservation valid?

Chesterfield Peaking Facility

It is hard to imagine that a proposed 1000 MW peaking facility does not qualify as a "significant build-out of natural gas generation facilities." However, Dominion did announce plans to develop four peaking units in two phases in 2023 and 2024 for a total of 1000 MW of generation that would operate about 5-10% of the time, during periods of high electricity demand.[22] It has not yet formally announced the cancellation of the project.

Perhaps we will see more information in the 2020 Integrated Resource Plan, due May 1, even though Dominion asked to be excused from discussing any new gas-fired units. With the lack of disclosure in the VNG application and Dominion's sleight-of-hand, it appears the public and perhaps even the Commission will remain insufficiently informed about important energy projects in Virginia.

The peaking facility is proposed in the vicinity of the VNG pipeline and could be the reason for the capacity request. However, the project is not yet approved and should not be considered a valid basis for undertaking new pipeline construction at this time.

The air quality permit is pending. Just as with the C4GT plant, Dominion's proposal flies in the face of new legislative requirements and state policy to reduce carbon emissions in Virginia. The Clean Economy Act would allow the facility to operate only through the end of 2045, limiting its operating life to 22-23 years.

Typically, a facility of this type would be paid for over a period of 35-40 years. Asking ratepayers to pay in full for a $600 million project that would have value for just about half its normal lifetime might not make sense. Especially, since there is a surplus of generating capacity in the region that is available to smooth out variations in output from renewables, just as occurs for other types of generation. Reliability could be maintained at a much lower cost to ratepayers than this new facility would require. Other options such as storage, or demand response, could prove to be much less expensive and provide additional advantages. But that is for the Commission to decide.

Dominion's proposal is not sufficient to justify construction of new pipeline capacity to serve a project that might not be built. VNG must also structure the pipeline project in a way that would reduce the risk to other participants. Having Dominion's need for the pipeline disappear with two-thirds of the pipeline's proposed service life remaining must be accounted for in the financial structure of the project. Otherwise, others could be burdened with an unfair portion of the cost.

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[22] "Dominion seeks permits to build new power plant in Chesterfield," Rich Griset, December 13, 2019, Chesterfield Observer

ACP Capacity Reservation

The Commission should not allow Dominion to add another pipeline capacity reservation before dealing with the huge surplus to which it is already exposed. VPSE signed a 20-year contract with the ACP for 300,000 Dth/d of unneeded pipeline capacity. Now it wants to add an additional exposure. Testimony in previous Fuel Factor cases reveals that Dominion intends to pass the $6 billion cost of the ACP contract on to its ratepayers, regardless of how much, if any, of the capacity reservation is actually used. New Virginia legislation makes that pass-through more difficult.[23]

The precedent agreement signed by VPSE with the ACP allows for it to cancel its obligation if the ACP is not in commercial operation by June 1, 2020. The contract allows for a thirty-day window, and then the option to cancel is foreclosed. If the ACP contract is not canceled, VPSE will be obligated to pay the full amount, especially if only some or none of the contract expense can be passed through to ratepayers.

Perhaps, the Commission could add a condition to the VNG proposal that requires Dominion to exit unnecessary pipeline capacity reservations before taking on new ones. If the ACP capacity reservation remains, new peaking plants should be approved only in locations where abundant reserved pipeline capacity is already available. Witness Lander testified in the 2019 Fuel Factor hearing that it is "important that the utility not over-procure firm capacity in the future because it virtually guarantees greater net cost to ratepayers."[24]

Requested SCC Action:

The Commission should consider the request for service by VPSE as invalid until the peaking facility has been approved. It is too risky to approve construction of the pipeline based on another speculative request for service. As with C4GT, there is ample time to develop the pipeline once it is certain when the plant will be constructed.

The depreciation period should be adjusted to recognize that the usage of the HIP by Dominion would occur for only 22-23 years.

The Commission should consider conditioning the Commission's ultimate approval of VPSE's request for service to be based on reducing unnecessary pipeline capacity reservations to avoid higher costs to ratepayers. Virginia energy companies should not expect to profit from projects that provide no value to their customers.

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[23] HB 167 Recovery of Fuel and Purchased Power Costs, 2020 Virginia General Assembly

[24] Testimony of Gregory M. Lander, June 19, 2019, Case No. PUR-2019-00070, Virginia State Corporation Commission

Columbia Gas of Virginia (CVA)

A search of SCC documents regarding Columbia Gas failed to reveal any public evidence that indicates Columbia Gas is short of capacity in Virginia.

Long-term forecasts of traditional gas use for residential and commercial customers show little or no increase in usage between now and 2050.[25] Industrial gas usage is most sensitive to price. According to the consultant retained by the SCC staff for the 2019 Dominion Fuel Factor proceeding, 41% of Columbia Gas deliveries in Virginia were used to generate electricity.[26] One of the power plants previously served by Columbia Gas, Bellemeade, has recently been retired. This would free up capacity rather than require more.

At peak usage, about 220,000 Dth/d of Columbia gas deliveries are for Dominion's Warren plant, built in 2014. The remaining 43,000 Dth/d are allocated to much smaller, older plants built in the 1990s (Chesterfield, Gravel Neck, Elizabeth River, South Anna).[27] Some of these plants are in the vicinity of the HIP. They are among the most likely facilities to be retired if emissions must be reduced to meet RGGI requirements, reducing the need for more gas supply. In any case, 41% of Columbia Gas of Virginia's current gas demand will be gone by 2045. Does it make sense for them to be the primary contributor to sustain the HIP after that time?

The main Columbia Gas pipeline from West Virginia expanded in capacity by1.3 million Dth/d in late 2018. This pipeline serves the Warren plant, providing plenty of long-term capacity. The WB XPress expansion project also included a connection to the Transco pipeline in northern Virginia.

The economic shock caused by Covid-19 will have a sustained effect on energy usage. The immediate effect on electricity use was noted previously. But economic setbacks have a prolonged effect on energy use. After the 2008-9 recession, energy use in developed nations fell by 5%.[28] Ten years later, the most developed nations consumed less energy than they had before the recession, although their economies had grown by 18%.

This is an important lesson for all of the requests for service for the HIP. They were likely derived from projections based on recent experience. We have seen that the C4GT and VPSE requests are based on assumptions that approvals to build their projects will occur very soon. An honest appraisal of the current situation shows that those projects are unlikely to receive immediate approvals. It will be some time before the effects on long-term energy use caused by this economic shock can be well understood. The only certainty is that energy use is significantly

[25] 2020 Annual Energy Outlook, Natural Gas, U.S. Energy Information Administration
[26] Testimony – Bernadette Johnson, consultant to SCC Staff, State Corporation Commission of Virginia, Case No. PUR-2019-00070, July 03, 2019 (MMcf/d converted to approximate Dth/d values)
[27] Ibid.
[28] "Recession and Recovery: Lessons From the 2010 BP Statistical Review of World Energy, Christof Ruhl and Joseph Giljum, International Association for Energy Economics

lower than we expected right now. And we don't know how long it will take to regain previous levels, if it does at all.

All of the participants in the VNG project will be affected by the decline in energy use precipitated by the pandemic. Previous experience documents that we are not likely to rapidly return to previous levels of energy consumption. Columbia Gas is no exception.

VNG's rebuttal testimony says that the VNG connection for Columbia Gas is to add to the "diversity" of supply, rather than being necessary to have an "adequate" supply. There is no urgent need to begin construction of the HIP. It would require a thorough evaluation to determine if Columbia Gas's requirements could carry the pipeline for its proposed 70-year service life.

Until that is determined, no authorization to begin construction should be given.

Requested SCC Action:

Require Columbia Gas to justify its request for service. This should be backed up with a risk evaluation that includes the loss of over 40% of its current demand by 2045 and the potential decrease in gas demand because of an economic setback.

Authorization to begin construction should be postponed until it is clear that one or more of the requests for service are legitimate and sufficient to pay for the HIP over its projected lifetime.

Virginia Natural Gas (VNG)

Virginia Natural Gas appears eager to dash headlong into a major long-term investment based on uncertain requests for service which, even if fulfilled, would leave VNG and Columbia Gas solely responsible for financially sustaining the pipeline for 60% of its projected service life.

There is nothing on the public record that indicates VNG requires additional gas supply in 2022. The company has already taken on a huge financial obligation by reserving 155,000 Dth/d of capacity over 20 years from the Atlantic Coast Pipeline (ACP), currently projected to begin operation in the first half of 2022.

What is the justification for the growth in demand that would require the addition of both the ACP capacity and the HIP capacity for the same 20-year term?

Based on the increased price of the ACP, the extrapolated cost for VNG's 20-year capacity reservation on the ACP is over $3 billion.[29] Lacking evidence of the need for this much added

[29] Amendment to Application for a Certificate of Public Convenience and Necessity and Blanket Certificates, Atlantic Coast Pipeline, Docket No. CP15-554-001, Volume I Public, March 11, 2016, Exhibit P

capacity, it might be difficult to pass the costs of the contract through to ratepayers. Adding $3 billion to customers' energy costs to pay for the ACP contract would increase their price of gas. Higher energy prices usually result in reduced consumption.

With unemployment heading towards depression-era levels, gas consumption is likely to significantly decline in VNG's service territory and perhaps stay lower than present levels for years.[30]

This is not the time for a responsible public utility to take on an additional obligation that has an uncertain future. The Commission should delay any authorization of the project until it is more certain that the current requests for service are valid and the project is structured in a way that would not leave VNG or its customers at risk.

Perhaps, the Commission should condition VNG's participation in the HIP with the requirement to exit its unnecessary capacity agreement with the ACP before entering another risky situation with the HIP. Like VPSE, Virginia Natural Gas has an opportunity to void its capacity reservation with the ACP if the pipeline is not in commercial operation by June 1, 2020.

Southern Company, VNG's parent company, has already determined that its partial ownership of the Atlantic Coast Pipeline no longer serves its corporate interest. In February of this year, Southern Company sold its 5% stake in the pipeline to Dominion Energy, which now owns 53% of the project.[31] The remainder is owned by Duke Energy.

Southern Company appears to approach gas pipelines more as an investment opportunity rather than a necessary way to obtain additional gas supply. Mr. Yagelski, author of VNG's rebuttal testimony for the HIP, was quoted as saying Southern Company became an owner of the ACP "because it's a good investment." He went on to say, "We didn't create it to purchase capacity for VNG."[32]

Southern Company is reeling from problems building a nuclear plant that is years behind schedule and billions of dollars over budget.[33] Perhaps it is willing to commence a multi-million dollar pipeline project without a clear indication that the two largest customers for it might not be built on schedule, or at all. The prospect of over $600 million in profits, as described by staff witness Armstrong, could eclipse possible risks.[34]

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[30] "Recession and Recovery: Lessons From the 2010 BP Statistical Review of World Energy, Christof Ruhl and Joseph Giljum, International Association for Energy Economics

[31] "Dominion agrees to buy Southern stake in Atlantic Coast Pipeline as project costs soar," Harry Weber, February 10, 2020, S&P Global

[32] "Virginia Natural Gas playing with big boys in Atlantic Coast Pipeline debate," Michael Martz, July 30, 2016, Richmond Times-Dispatch

[33] "Plant Vogtle Update: Further Behind Schedule, Still Billions Over Budget," Amy Kiley & Virginia Prescott, May17, 2019, GPB News

[34] Summary of Testimony of Scott C. Armstrong, Staff Pre-filed Testimony Part 2, March 31, 2020, Virginia State Corporation Commission, Case No. PUR-2019-00207

Southern Company could abandon the proposed pipeline project as soon as it failed to meet its corporate goals or if it put added pressure on already strained capital requirements. Some of the nation's largest utility holding companies appear willing to use Virginia's energy system as part of their nationwide monopoly game to increase profits.

The Commission must consider the facts and risks associated with the Header Improvement Project. Especially as we face an economic setback that will affect energy demand and access to capital.

Requested SCC Action:

Require Virginia Natural Gas to justify its request for service.

The Commission should delay any authorization of the project until it is more certain that the current requests for service are valid and the project is structured in a way that would not leave VNG or its customers at risk.

Consider conditioning VNG's participation in the HIP with the requirement to exit its unnecessary capacity agreement with the ACP before entering another risky situation.

Adjusting the Depreciation Schedule for the Project

Deputy Director Armstrong suggested in his testimony that VNG depreciate the project facilities over a 20-year period to reduce the potential for stranded costs that might have to be covered by VNG's ratepayers.[35]

Risks would certainly be reduced if the period over which the pipeline would be repaid corresponded to the maximum period of use for the major subscribers of the proposed pipeline.

If Dominion's peaking facility is approved for its proposed location in Chesterfield County, it must cease operation by the end of 2045. It is designed to be built in two phases in Spring 2023 and Spring 2024. This would allow a maximum operating life of 22-23 years.

If C4GT decides to build its generating facility and begins operation in 2023, as proposed, it must cease operation by the end of 2050. If the plant cannot operate profitably, it can be retired any time before that date. The maximum operating life would be 28 years.

Columbia Gas serves several of Dominion's power plants in the vicinity of the HIP and another elsewhere in the state. Testimony from Fuel Factor proceedings show that 41% of Columbia

[35] Summary of Testimony of Scott C. Armstrong, Staff Pre-filed Testimony Part 2, March 31, 2020, Virginia State Corporation Commission, Case No. PUR-2019-00207

Gas's demand in Virginia is for electricity production. This need would end in 2045. That would free up far greater capacity than what Columbia Gas has reserved from the VNG project. Likely maximum usage of HIP by CVA is 23 years.

Virginia Natural Gas has no verified need for capacity from the HIP. It is obligated to pay for 155,000 Dth/d of capacity from the Atlantic Coast Pipeline in the same year the HIP is proposed to be in service. No evidence is in the public record that supports the need for an additional capacity reservation by VNG. There is no indication that increased customer demand for gas could allow VNG to be the sole supporter of the pipeline after the other participants' requirements are fulfilled. Columbia Gas should have considerable available capacity at that time and could serve any increased demand using its existing connection to VNG.

Given that 20-year precedent agreements have been executed with the various parties, adjusting the depreciation period from 70 years, as proposed by VNG, to 20 years, as suggested by SCC staff, would be appropriate. This would mean the pipeline would be paid for by those who use it and a great overhang in payments would not be left for VNG or its customers to assume.

After the initial 20-year capacity agreements have expired, lower cost short-term agreements can be issued as needed. VPSE would require just 2-3 years of additional service, 3 more years for Columbia Gas, and maybe 8 more years for C4GT, if it is still operating at that time.

VNG would likely be the remaining shipper after 2050. They could determine what is appropriate for their future use of the pipeline. The Commission should include the costs to retire and remove the HIP facilities at the end of their service life. VNG did not include those costs in their estimates.

The HIP is designed for the capacity requirements of the electric generating stations. The 30-inch diameter pipeline additions probably take into account possible service to the Chickahominy plant too. VNG's proposal to segment the construction process would still result in much higher than necessary costs if the generating facilities are delayed or never exist. Their suggestion to leave customer protection issues to "be subject to review for reasonableness and prudence in an appropriate future rate proceeding" serves only the company's interest and not their customers'.

Additional Risk Protection

VNG overestimates the risk protection that C4GT's precedent agreement provides. Even if the C4GT plant is built on schedule and enters into a 20-year long-term firm transportation agreement with VNG, the full amount of revenues from C4GT is not certain. Unlike public utilities such as Dominion and Columbia Gas, C4GT, LLC exists only for the purpose of building and operating a single power plant. As soon as that plant no longer serves the interests of its investors, it can be retired and the company can dissolve or declare bankruptcy.

That happened to a Panda facility in Texas after just 3 years of operation.[36] Another gas-fired plant closed just 8 years after startup in California.[37] The losses in expected revenues would have to be borne by the remaining shippers on the pipeline, VNG itself, or passed through to its customers.

The only remedy that would hold the other parties harmless would be for the Commission to require C4GT to post a bond that would cover any shortfall in payments for the 20-year capacity agreement with VNG. This is typical business practice, especially when one party expects another party to make significant investments on its behalf.

This would allow the Commission to protect the interest of VNG's owners and their ratepayers.

Requested Actions by the State Corporation Commission

The comments above are intended to support the request that the Commission do the following:

Postpone the Proceedings

There is great uncertainty in the timing and need for service by every party seeking service from the Header Improvement Project. The urgency identified by VNG for rapid action does not exist. All of the requests for service are unsupported by a documented need and authorized in-service dates at this time.

The timetable for a rapid decision was requested by VNG to meet C4GT's desire to begin operation in 2023. C4GT has already backed out of a previous commitment to build the facility in 2017. It is having difficulty raising capital in the current financial situation. And it is attempting to sell its output into a severely oversaturated market, in the face of an epic economic shock that we cannot yet fully comprehend.

To consider C4GT's request for service to be valid at this time, it should be required to be listed on PJM's generation queue for operation in 2023 and to post a bond that would cover their expected payments for their 20-year capacity agreement with VNG.

VPSE, Columbia Gas, and VNG have taken the approach that as long as C4GT has requested service, they want some too. Dominion's proposed peaking facility is not approved. Columbia Gas and VNG have provided no proof of higher demand and inadequate capacity, especially with the prolonged period of lower energy use they are likely to experience due to the current economic setback.

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[36] *Texas Power: No Country for Old Thinking,* Liam Denning, April 21,2017, Bloomberg, https://www.bloomberg.com/gadfly/articles/2017-04-21/griddy-launch-panda-thermal-bankruptcy-the-state-of-texas-power

[37] *California Merchant Generator, Lamenting Market Forces, Files for Bankruptcy,* Power Magazine, Dec. 8, 2016

The Commission would fail to protect the people of Virginia and the shareholders of our utilities if they took the service requests at face value without in-depth evaluation.

A postponement would allow for more clarity regarding the validity of these requests. It would also give a much greater chance for normal public participation to occur. More time protects all parties.

Adjust the Depreciation Schedule

Risks would be reduced if the period over which the pipeline is repaid also corresponds to the maximum period of use for the major subscribers of the proposed pipeline.

SCC staff testimony recommended a 20-year depreciation period rather than the 70-year term proposed by VNG. Twenty years is about the maximum period of use required by the companies requesting service. The remaining few years of service for each company could be covered by short-term agreements of the appropriate length. Each company would pay for the capacity it needs without burdening others with unexpected costs.

Ask VPSE and VNG to Exit ACP Agreements

VPSE and VNG have requested additional pipeline capacity from this project when both companies have huge commitments for capacity from the Atlantic Coast Pipeline beginning at the same time. Neither the need for the ACP capacity nor the VNG capacity has been justified by the companies.

Billions of dollars are at risk. VPSE's contract with ACP requires $6 billion over 20 years. VNG is obligated to pay the ACP over $3 billion. Either the companies or their ratepayers must pay for the contract. Customers would experience an added expense for an unnecessary pipeline. The companies would be harmed financially if they had to bear the cost themselves. As a protector of both interests, the Commission can remind VPSE and VNG that they have an opportunity to exit the contracts on June 1, 2020, if the ACP is not yet in commercial operation.

It is difficult to justify a new request for service from VNG with such an excess of committed capacity available to VPSE and VNG.

Respectfully submitted,

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